

## Frequently Asked Questions

This document addresses frequently asked questions pertaining to a variety of data management topics including STORET, Web-SIM, format conversion, and more. Simply select the topic or question of choice from the menus below. Check back often, as this document will be updated when new information becomes available. If there are additional topics or questions you would like to see added please contact Jolene Berscheid at MT DEQ ([jberscheid@mt.gov](mailto:jberscheid@mt.gov) or 406-444-5304).

### **STORET**

[How do I download data from the National STORET Warehouse?](#)

[What are the definitions for the Activity Category valid values?](#)

### **Web-SIM**

[Can I edit a configuration in the MTWTRSHD org ID?](#)

[How does Web-SIM locate my data file?](#)

[My FTP site does not open when I click on the link.](#)

[I am getting an ORA-20000 error when importing a text file.](#)

[How can I view data that has been imported to Web-SIM?](#)

[How can I view the status of an import that was brought into Web-SIM but was not migrated or deleted?](#)

[Can I undo a migration of data from STORET?](#)

[When do I delete an Import?](#)

[When will the data I migrated be accessible at the National STORET Warehouse?](#)

### **Format Conversion**

[How do I generate a tab-delimited text file from an Excel template?](#)

[How do I generate a tab-delimited text file from an Access Query?](#)

[How do I generate a PDF from an Excel file?](#)

[How do I generate an Excel file from a text file?](#)

### **Storease**

[Is Storease still active?](#)

[What are the Comment-Code Definitions from the DEQ Legacy Storease?](#)

### **Miscellaneous**

[Where do you recommend looking for the data I need for my project?](#)

[What is the difference between a field blank and a trip blank?](#)

[How do I convert between the various latitude and longitude formats?](#)

[For the column Value Type, is flow an actual or calculated value since you have to multiply velocity by cross-section to obtain a result?](#)

[Is there an option to create organization-specific analytical and collection procedures?](#)

---

## STORET

### Q: How do I download data from the National STORET Warehouse?

The following steps will walk you through the process of downloading monitoring data from the National STORET Warehouse into a text format.

1. Start from the main STORET website: [www.epa.gov/storet](http://www.epa.gov/storet).
2. Click on the STORET icon.
3. Enter the Modernized STORET Warehouse by clicking the **Browse or Download Modernized STORET Data** button at the bottom of the screen.
4. Choose which type of query you would like to perform (Station Descriptions, Regular Results, Biological Results, or Habitat Results), and refer to the corresponding section below to view your query options.
5. After you select your query options and click **Continue** you will be directed to a Summary page that displays your search results and search criteria.
6. On this page you can customize the content of your report by selecting specific Data Elements from the Select Data Elements for Report box at the bottom of the screen. Select **Continue** when your data elements have been selected.
7. The Download Site Description page gives the size of your requested report download with the option of downloading the file now or, for larger files, compress the file before download. For regular sized report downloads select **Download your file now**.
8. The STORET Warehouse generates a tilde (~) delimited text file and displays it as a web page. Choose "Save As" from your web browser and save the file as a text file.

- **Station Descriptions**

You have the choice to query by Geographic Location or Organization and Station ID.

1. Geographic Location allows you to search by State/County, Latitude/Longitude boundaries, or HUC. You can also specify station type, characteristic, and organization.
2. Organization and Station ID allows you to search for station IDs under a specific organization. You can also specify station type and characteristic.
3. After you have chosen your criteria click **Continue** and go to step 5.

- **Regular Results**

You have the choice to query by Geographic Location, Station, or Project.

1. Geographic Location allows you to search by State/County, Latitude/Longitude boundaries, or HUC. You can also specify activity start date, activity medium, and characteristic.
2. Station allows you to search by station IDs under a specific organization. You can also specify activity start date, activity medium, and characteristic.
3. Project allows you to search by project under a specific organization. You can also specify activity start date, activity medium, and characteristic.
4. After you have chosen your criteria click **Continue** and go to step 5.

- **Biological Results**

You have the choice to query by Geographic Location, Station, or Project.

1. Geographic Location allows you to search by State/County, Latitude/Longitude boundaries, or HUC. You can also specify activity start date, activity intent and community sampled, and characteristic.
2. Station allows you to search by station IDs under a specific organization. You can also specify activity start date, activity intent and community sampled, and characteristic.
3. Project allows you to search by project under a specific organization. You can also specify activity start date, activity intent and community sampled, and characteristic.
4. After you have chosen your criteria click **Continue** and go to step 5.

- **Habitat Results**

You have the choice to query by Geographic Location, Station, or Project.

1. Geographic Location allows you to search by State/County, Latitude/Longitude boundaries, or HUC. You can also specify activity start date and characteristic.
2. Station allows you to search by station IDs under a specific organization. You can also specify activity start date and characteristic.
3. Project allows you to search by project under a specific organization. You can also specify activity start date and characteristic.
4. After you have chosen your criteria click **Continue** and go to step 5.

---

**Q: What are the definitions for the Activity Category valid values?**

Below is a list of commonly used Activity Categories and their descriptions, with the most common categories in bold.

<u><b>Activity Category</b></u>	<u><b>Category Description</b></u>
Composite w/o Parents -----	Describes a sample that is a composite of either several discrete sampling events not described elsewhere, or is a sample collected by a continuous process over some time period. No database record exists as its parent.
Composite-with Parents -----	A sample created by combining two or more 'parent' samples may only contribute to such a composite sample once. They are 'consumed' by the compositing process.
<b>Field Blank</b> -----	A sample of laboratory reagent water that is transferred to a sampling bottle in the field to assess the potential for field conditions, supplies, and sampling handling to influence sample results.
<b>Field Replicate/Duplicate</b> -----	A sample 'twinned' to another sample with respect to procedures, medium, and tools used. Used to confirm or assure sample results.

Field Spike -----	A 'spiked' sample, whose concentration(s) of one or more contaminants have been intentionally increased by a known amount, through the (secret) addition of material to the sample.
Field Split-----	A sample split in the field and sent to two different laboratories to assess if the different laboratories provide comparable results.
Integrated Horizontal Profile-----	A discrete/integrated sample, usually derived from a continuous record, representing some portion or segment of a horizontal track within the study area.
Integrated Vertical Profile-----	A discrete/integrated sample, usually derived from a continuous record, representing some portion or segment of a vertical track within the study area.
Replicate Habitat Assessment -----	An evaluation of a habitat, repeating an earlier evaluation, used to confirm or assure the previous results.
<b>Replicate Msr/Obs</b> -----	A measurement 'twinned' to another measurement with respect to a field protocol, procedure, etc. Used to confirm/assure measurement results.
Routine Habitat Assessment -----	A field activity conducted to evaluate a habitat, according to an organization's pre-defined habitat assessment scheme.
<b>Routine Msr/Obs</b> -----	MEASUREMENTS involve something measured in its environmental setting usually using some type of equipment. OBSERVATIONS are made by people, usually without the use of equipment, and are frequently qualitative.
<b>Routine Sample</b> -----	A sample gathered using straightforward 'grab' procedures for purposes of a general evaluation of the environment at the site.

[Back to top](#)

---

## Web-SIM

### Q: Can I edit a configuration in the MTWTRSHD org ID?

No, you should not edit the configurations in MTWTRSHD because they are created and managed by the Montana Department of Environmental Quality (MT DEQ) and numerous individuals use the same configuration. If you find that the configurations provided do not fully support your data needs, contact Jolene Berscheid ([jberscheid@mt.gov](mailto:jberscheid@mt.gov) or 406-444-5304) at MT DEQ for more information or to request modifications.

---

**Q: How does Web-SIM locate my data file?**

When you are importing a text file, Web-SIM is directed to your organization's FTP site. Before you start the Web-SIM Fast Track Import Process you need to load your text file to the FTP site. To do this, click on the link to the FTP site from the Web-SIM home page ("Click here to go to the FTP site"). You will be instructed to enter in your User ID and Password before the FTP site opens. Once open, simply copy your text file and paste it into the FTP window.

---

**Q: My FTP site does not open when I click on the link.**

This is often an issue specific with your computer's settings. Here are two options to try:

1. In your web-browser go to → Tools → Internet Options... → Advanced tab → Under the Browsing category make sure there is a check mark in the box next to "Enable folder view for FTP sites" → OK.
  2. You can also try to hold the Ctrl key down while you click on the FTP site link. This has been the most common solution to the problem.
- 

**Q: I am getting an ORA-20000 error when importing a text file.**

An ORA-20000 error usually signifies there is a problem with the text file you are importing.

1. Go into the Import Log and delete your import with the error.
2. Go back to your Excel template and check for extra spaces at the beginning of any fields. When your Excel file is ready, convert it to a text file. Remember to delete your header row before saving as a text (tab-delimited) file.
3. Once converted, open up the text file.
  - a. Use the Replace option under the Edit menu to find quotations (") and replace with nothing.
  - b. Also, scroll to the bottom of your text file and verify there are no extra lines or tabs.
4. Save your text file, copy it to the FTP site, and try the import again.

If you continue to get errors, email Jolene Berscheid ([jberscheid@mt.gov](mailto:jberscheid@mt.gov)) about what errors you are receiving and attach both your text file and Excel file.

---

**Q: How can I view data that has been imported to Web-SIM?**

You can view stations and results that are in Web-SIM using View, which is found under the Stations and Results menus. In the View window, select Detail to examine the entire record. Each record will also have a status of the following:

A = Approved for migration to STORET

N = Not approved for migration to STORET

E = Exported (migrated) from Web-SIM to STORET

U = Uploaded if Web-SIM copied data from STORET itself

---

**Q: How can I view the status of an import that was brought into Web-SIM but was not migrated or deleted?**

There may be cases where you have previously imported files to Web-SIM, but did not migrate them to STORET. This may occur because you had to stop your session, you wanted to review a file, or for another reason. Other times, you may not recall whether you migrated a particular file to STORET, or removed the imported data from STORET. The following outlines how to review your imports to determine their status:

1. From either the Stations or Results menus at the top of the window (depending on your desired import type), select Import Log.
2. The Import Log will show you what imports are still in Web-SIM.
3. Clicking on the Status button will take you to the Import Status window (the same window you viewed right after you successfully imported your file).
4. From this window you can view details of the import, Migrate Records to STORET, or Delete Import from SIM.

---

**Q: Can I undo a migration of data from STORET?**

Yes, you can undo a migration of data from STORET **only** if the import is still in Web-SIM. Web-SIM cannot undo a migration once the import has been deleted from Web-SIM. Additionally, you cannot undo a migration once any changes or additions have been made to the migrated data through the STORET Data Entry Module.

1. Under the Advanced menu at the top of the window select Migration Log. The Migration Log shows which imports have been migrated to STORET.
2. Identify the migration that you would like to remove/undo from STORET, and click the appropriate Clear Migration from STORET button.
3. After the migration is cleared from STORET, your import file will change status from **Exported** (migrated) from Web-SIM to STORET to **Approved** for migration to STORET.

---

**Q: When do I delete an Import?**

At this time, you should only delete an import from Web-SIM if you do not want to migrate any of the records to STORET. This situation may occur because there are errors you need to fix or you are only test loading the data. We are asking individuals to not delete any imports for successfully migrated data at this time in order to preserve the option of unmigrating the data from STORET.

---

**Q: When will the data I migrated be accessible at the National STORET Warehouse?**

Due to the monthly refresh schedules, data is usually available at the National STORET Warehouse within 6 weeks of migration or less. The Montana (Regional) STORET Warehouse usually updates data within 4 weeks or less ([www.montanastoret.com](http://www.montanastoret.com)). Users can request a refresh of the Montana Warehouse more frequently if large amounts of data

are being loaded, which would aid in reviewing the data. The National Warehouse is refreshed with new data on the 2<sup>nd</sup> Monday of every month.

[Back to top](#)

---

## Format Conversion

### **Q: How do I generate a tab-delimited text file from an Excel template?**

The following steps will walk you through the process of converting an Excel template to a tab-delimited text file that can be imported into Web-SIM.

1. Save the Excel template in its final form and keep open.
2. Delete the header row entirely by selecting the whole row → Edit → Delete.
3. Click on File → Save as... → Select the folder you want the file saved in → Select Text (Tab-delimited) (\*.txt) as the Save as type → Specify a file name → Save.
4. As the file saves, there may be one or two warning boxes that appear. Select Yes for both warning boxes if they appear.
  - a. If the Excel workbook contains more than one sheet a warning appears that notifies the user that only the selected sheet will be converted.
  - b. Another warning notifies the user that the features in the Excel file might not be compatible with the tab-delimited text file.
5. Close the open Excel file without saving changes.
6. Before importing the new text file into Web-SIM, it is necessary to check for quotation marks and extra lines at the bottom of the file.
  - a. Quotation marks, which are undesirable in SIM import files, can easily be removed with the Notepad text editor: Edit → Replace → Find quotation mark (") and replace with nothing → Replace All → Save.
  - b. If there were blank rows at the end of the Excel file, extra tabs may have been generated at the end of the text file, causing errors on import. Scroll down to the bottom of the text file and delete any extra rows → Save.
7. The finalized text file can then be saved to the Web-SIM ftp site where it can be imported using the Web-SIM Fast Track Import Process.

---

### **Q: How do I generate a tab-delimited text file from an Access Query?**

The following steps will walk you through the process of converting an Access Query to a tab-delimited text file that can be imported into Web-SIM.

1. Verify that the criteria for the query you wish to export are set correctly and that the query has been saved.
2. From the main query menu, right-click on the query to be exported → Export...
3. Select the folder to save the text file in and name the file.
4. Verify that the "Save as type" is set to Text Files (you may have to use the drop-down menu to select Text Files) → Save
5. Choose Delimited as your export type → Next
6. Select Tab as the delimiter that separates your fields.



7. Check the box next to “Include Field Names on First Row” unless you are generating a SIM file for direct import. In that case headings are not desired.
  8. Set the Text Qualifier to {none} → Next
  9. The folder where your file will be exported is shown → Finish
  10. If everything exports correctly, there will be a window saying the export is finished → OK
- 

**Q: How do I generate a PDF from an Excel file?**

The following steps will walk you through the process of converting an Excel file to a PDF file. Note that this procedure requires Adobe Acrobat Standard in preferably version 6.0 or newer.

1. Open the Excel file that is to be converted into a PDF.
  2. If there is more than one sheet in the workbook, select the first sheet to be converted. Note that this process will only convert one sheet at a time. In order to convert a multi-sheet workbook, steps 1-5 must be repeated.
  3. Select from the top menu → Adobe PDF → Convert to Adobe PDF.
  4. If there is more than one sheet in the workbook, one warning prompt will come up → Yes.
  5. Select a name and location to save the PDF file to → Save.
  6. The spreadsheet will be converted, and the new PDF format will automatically be displayed.
  7. Repeat steps 1-5 to convert more Excel files to PDF.
- 

**Q: How do I generate an Excel file from a text file?**

The following steps will walk you through the process of converting a text file to an Excel file where updates and modifications to data are often made easier.

1. Open a new Excel workbook.
2. Data → Get External Data → Import Text File
3. Locate the text file you wish to import into Excel → Import (This starts the Text Import Wizard.)
4. Choose Delimited as the original data type → Next
5. Select the Delimiter (tab, tilde (~), comma, pipe (|), etc) → Next
6. In the data preview window, highlight all of the columns by selecting the first column, scrolling to the end, holding down the shift key, and selecting the last column → Select Text as the Column Data Format → Finish (Note: Exceptions to this would be if numeric or date/time data types are needed to perform data analysis, graphing functions, etc. Then the data type for these columns can be individually set in this procedure.)
7. Put data in the Existing Worksheet → OK
8. To turn the Auto-Filter function on → Data → Filter → AutoFilter. Do the same actions to turn the Auto-Filter function off.

[Back to top](#)

---



## Storease

### Q: Is Storease still active?

No, Storease has become a static, historic database. The majority of data from Storease will be located in the MONT-DEQ organization within Modernized STORET in the near future. At this time, however, the migrated data is under review, but can still be accessed by contacting MT DEQ and requesting a Storease data retrieval.

---

### Q: What are the Comment-Code Definitions from the DEQ Legacy Storease?

<b><u>Letter</u></b>	<b><u>Description</u></b>
A	Value reported is the mean of two or more determinations
B	Results based on colony counts outside the acceptable range
C	Value calculated
D	Indicates field measurements
E	Indicates extra samples taken at composite stations
F	For species, indicates female sex
G	Value reported is the maximum of two or more determinations
H	Value from field kit determinations. Results may not be accurate
I	The value reported is less than PQL and greater than MDL
J	Estimated value
K	Actual value is known to be less than value given
L	Actual value is greater than given
M	Presence verified but not quantified
N	Presumptive evidence of presence of material
O	Sampled, but analysis lost, not performed, or resulted in lab error
P	Too numerous to count
Q	Sample held beyond normal holding time
R	Significant rain in the past 48 hours
S	Laboratory test
T	Value reported is less than criteria of detection
U	Indicates material was analyzed for but not detected
V	Analyte was detected in both sample and associated methods blanks
W	Value observed is less than the lowest value reportable under 'T' code

- X Value is quasi vertically integrated sample
- Y Lab analysis from unpreserved sample, may not be accurate
- Z Too many colonies were present to count (TNTC)

[Back to top](#)

---

## Miscellaneous

### **Q: Where do you recommend looking for the data I need for my project?**

STORET - [http://www.epa.gov/STORET/dw\\_home.html](http://www.epa.gov/STORET/dw_home.html)

All of Montana's data that has been supplied to EPA has been placed in the Modernized STORET System for public accessibility. Modernized STORET is currently receiving new data on a regular basis, and will continue to do so for the foreseeable future. Downloads performed for the same sites may differ over time as a result of the addition of new data by their owners. Montana's two main organization identifiers are MONT-DEQ (data from historic Storease database) and MT-DEQ (data from 1999-present plus some historic biological data). Montana STORET also has five organization IDs external to DEQ: MTWTRSHD, MTVOLWQM, TSWQC, MBMG, and PPL.

Clean Water Act Information Center - <http://www.deq.mt.gov/CWAIC/default.aspx>

The Montana Clean Water Act Information Center (CWAIC) conveys information about the quality of Montana's rivers, streams, lakes, and wetlands in relation to Montana's Water Quality Standards. Specifically, it displays the results of water quality assessments made on the basis of available water monitoring data. It is not intended to be a means of access to water quality monitoring field data.

Ground-Water Information Center (GWIC) - <http://mbmggwic.mtech.edu/>

The Ground-Water Information Center (GWIC) at the Montana Bureau of Mines and Geology (MBMG) is the central repository for information on the ground-water resources of Montana. The data include well-completion reports from drillers, measurements of well performance and water quality based on site visits, water-level measurements at various wells for periods of up to 60 years, and water-quality reports for thousands of samples. The databases at GWIC are continually updated with new data from driller's logs, MBMG research projects, and research projects from other agencies.

Montana Water Quality Monitoring Query System -  
<http://nris.state.mt.us/apps/WQProject/WaterMain.asp>

Developed by the Montana Natural Resource Information System (NRIS), this query system allows the user to view a summary of what type of data may be available and from what agency. This system does not contain any actual data; it is only designed to help guide the user to the data source.

National Water Information System (NWIS) - <http://water.usgs.gov/data.html>

The USGS National Water Information System (NWIS) is a very large collection of data and information on the water resources of the United States. The database contains current and historical water data from more than 1.5 million sites across the nation. On this Web site, data are displayed as graphs, in tables, or on maps. Data files can also be downloaded.

---

**Q: What is the difference between a field blank and a trip blank?**

Blank samples, in general, are used to determine the potential for contamination to affect sample results. A *field blank* is a sampling/analytical system QC sample used to determine if the samples from a single sampling event have been contaminated due to site conditions, sampling equipment, analytical environment, or some combination of these. A *field blank* can also be described as a QC sample that has a relationship to only the samples collected during a specific Station Visit. In contrast, a *trip blank* is a sampling event QC sample used to determine if sample contamination is due to transport conditions, including cross contamination from other samples shipped in a particular cooler. A *trip blank* can also be described as a QC sample that has a relationship to many samples collected during the many Station Visits that make up a single trip. The other common type of QC sample is a method blank. A *method blank* is a laboratory QC sample used to determine if the laboratory environment or analytical equipment is contaminated.

---

**Q: How do I convert between the various latitude and longitude formats?**

On the Montana Natural Resource Information System (NRIS) website there is an easy and simple tool that will convert any one of the three most common formats for representing latitude and longitude into the other two formats. This tool is located at: <http://maps2.nris.state.mt.us/topofinder1/latlong.asp>.

Another helpful tool can be found at: <http://www.wcrl.ars.usda.gov/cec/java/lat-long.htm>. This website will determine the surface distance between two points of latitude and longitude. The only constraint is that the latitudes and longitudes need to be in degrees minutes seconds format.

---

**Q: For the column Value Type, is flow an actual or calculated value since you have to multiply velocity by cross-section to obtain a result?**

The convention applied at DEQ is as follows: When the result value reported is determined by measurement, the Value Type is Actual. Consider the case where a lab takes an aliquot of a few ml for analysis, and then calculates the result to standardize back to mg/L. Although the result has been calculated, it was calculated from a value that was measured directly. In Flow, you are taking measurements to determine area and velocity that are used in the calculation, so Value Type would be “Actual” for flow determinations using a meter.

In contrast, Total Nitrogen (TN) is sometimes calculated by just adding up the different nitrogen parameters that have been reported, and nothing new is measured directly. The calculation is made from other reported characteristic results. Here, Value Type would be “Calculated”.

Another example that is a little less clear is the calculation of TDS from Specific Conductance (conductivity). In this case, it is still considered a calculated value, even though SC has been measured. The reason is that no direct measurement of the dissolved solids has been performed. So if you are measuring conductivity, using a conversion to get Total Dissolved Solids, and are reporting TDS, use Calculated as the Value Type. (However, it would be best in that case to just report Specific Conductance (conductivity). MT-DEQ has also established a method to differentiate these TDS results from lab generated TDS results. This method, TDSMETER, could be used if reporting TDS read by a field meter is desirable.

---

**Q: Is there an option to create organization-specific analytical and collection procedures?**

Yes, Field/Lab Analytical Procedures and Sample Collection Procedures can be created specifically for your organization if the need arises. The objective is to standardize procedures to reduce variability in the data and increase data consistency and comparability for analysis. MT DEQ will be overseeing the creation of such procedures, therefore, the following information must be submitted and approved by MT DEQ before the procedures can be uploaded to your organization’s ID.

- **Field/Lab Analytical Procedure**

The required elements to create a Field/Lab Analytical Procedure are as follows:

1. A unique ***Procedure ID***. The Procedure ID can be no more than 15 characters long.
2. A ***Procedure Name***, which simply serves as a brief description of the procedure.
3. A ***Procedure Citation***. A bibliographic reference that is cited to provide additional information concerning an organization’s procedures and methods. For the Citation field, an organization can either cite a publication from the list of 385 pre-defined citations in STORET, or an in-house publication if one exists, for example, “Official Lab Procedures Manual.” That same Citation can then be used to create other Organizational Analytical Procedures if desired. To create a Citation, the following information is needed:
  - a. The *Citation Title* serves as the official name of the publication cited – up to 120 characters long.
  - b. The *Name(s) of Author(s)* of the publication being cited – up to 120 characters long.
  - c. The *Publishing Organization’s Name* that issued the publication being cited – up to 120 characters long.
  - d. The *Publication Year* – the copyright year of the publication being cited.

- e. The *Volume and Page Number* within the literature cited that apply to the data supported by the citation.
  - f. (Optional) *Comments* – any additional text concerning the citation – up to 256 characters long.
4. (Optional) You can also select a piece of ***Analytical Equipment*** that is the primary piece of equipment used to determine a result value for the target characteristic(s) during an analytical procedure. If you choose to include analytical equipment as part of the procedure, it must be chosen from a list of STORET allowed-values for equipment and should apply to the procedure all of the time.
  5. (Optional) ***Comparable National Procedure***. List a National Procedure that is similar to the one being defined.

- **Sample Collection Procedure**

The required elements to create a Sample Collection Procedure are as follows:

1. A unique ***Procedure ID***. The Procedure ID can be no more than 10 characters long.
2. A ***Procedure Name***, which simply serves as a brief description of the procedure.
3. (Optional) ***Description Text***. A larger area to describe the Sample Collection Procedure in more detail.
4. (Optional) ***Procedure Citation***. A bibliographic reference that is cited to provide additional information concerning an organization's procedures and methods. See the above example on how to construct a proper citation.

[Back to top](#)

---